

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A communications management ~~system~~apparatus, comprising a networked computing means on which is provided:

a translation agent with access to usage data of a plurality of communications resources;

a database, ~~provided in a form~~ accessible to the translation agent, and including data in the system-specific format to assist the translation agent to convert this to the common format; and

a processing agent, wherein

~~the~~ said translation agent ~~being~~ is arranged to consolidate the usage data of ~~the~~ said plurality of communications resources by consulting ~~the~~said database and converting system-specific data to data having a said common format; and

a~~said~~ processing agent is arranged to ~~extract and/or infer~~ a communication event that does not have a recorded duration measurement and to calculate staff, transmission & infrastructure costs.

2. (Currently Amended) ~~A communications management system~~ Apparatus according to claim 1, ~~in which~~ wherein the processing agent is arranged to infer a communication even that does not have a recorded duration with reference to time per byte of data transmitted~~the communications resources are selected from the group consisting of PBX telephone systems, IP telephony systems, email servers, proxy servers, firewalls, switches, routers, web servers and mobile telephony and other emerging media.~~

3. (Currently Amended) ~~A communications management system~~ Apparatus according to claim 1, ~~or claim 2, in which wherein the processing agent is arranged to infer a communication event that does not have a recorded duration with reference to a defined time for any data transmissionthe networked computing means includes a removable data storage reader to which the acquisition agent has access, thereby to allow externally created log files to be made available to the translation agent.~~

4. (Currently Amended) ~~A communications management system according to claim 3 in which the removable data storage reader is a CD-ROM-compatible drive~~Apparatus according to claim 1, wherein the processing agent is arranged to infer a communication event that does not have a recorded duration with reference to a defined time per byte of data transmitted up to a defined maximum.

5. (Currently Amended) ~~A communications management system according to any one of the preceding claims including an at least semi-permanent data link from the networked computing means to a further computing means~~Apparatus according to claim 1, wherein the processing agent retains staff cost data for conversion of duration measurements and inferences into staff costs.

6. (Currently Amended) ~~A communications management system according to claim 5 in which the at least semi-permanent data link is the Internet~~Apparatus according to claim 5, wherein the processing agent includes a plurality of staff cost data for a plurality of staff grades.

7. (Currently Amended) ~~A communications management system~~ Apparatus according to claim 5, wherein the processing agent includes a plurality of staff cost data for a plurality of dates in which the at least semi-permanent data link is a dial-up connection to a remote device.

8. (Currently Amended) ~~A communications management system according to any one of the preceding claims in which an acquisition agent is provided to acquire usage data of the plurality of communications resources and to provide this to the translation agent~~Apparatus according to claim 5, wherein the processing agent includes a plurality of staff cost data for times of the day.

9. (Currently Amended) ~~A communications management system according to any one of the preceding claims in which the processing agent is arranged to extract/infer a duration measurement for communications events included in the usage data~~Apparatus according to claim 5, wherein the processing agent includes a plurality of staff cost data for days of the week.

10. (Currently Amended) ~~A communications management system according to claim 9 in which the processing agent includes at least one rule for inferring a duration measurement in respect of at least communications events without a recorded duration~~Apparatus according to claim 1, wherein the processing agent retains transmission cost data for conversion of duration into a transmission cost.

11. (Currently Amended) ~~A communications management system according to claim 10 in which the rule is at least one of:~~

- ~~—— a defined time per byte of data transmitted;~~
- ~~—— a defined time for any data transmission; and/or~~
- ~~—— a defined time per byte of data transmitted up to a defined maximum.~~

Apparatus according to claim 1, wherein the processing agent retains transmission cost data for conversion of size measurements into transmission cost.

12. (Currently Amended) ~~A communications management system according to any one of claims 9 to 11 in which the processing agent retains staff cost data for conversion of duration measurements into staff cost~~Apparatus according to claim 1, wherein the processing agent includes a plurality of transmission cost data for a plurality of different destinations.

13. (Currently Amended) ~~A communications management system according to claim 12 in which the processing agent includes a plurality of staff cost data for a plurality of different staff grades, dates, times of day and days of week~~Apparatus according to claim 1, wherein the processing agent includes a plurality of transmission cost data for a plurality of different media.

14. (Currently Amended) ~~A communications management system according to any one of claims 9 to 11 in which the processing agent retains transmission cost data for conversion of duration and/or size measurements into transmission cost~~Apparatus according to claim 1, wherein the processing agent includes a plurality of transmission cost data for a plurality of different routes.

15. (Currently Amended) ~~A communications management system according to claim 14 in which the processing agent includes a plurality of transmission cost data for a plurality of different destinations, media, routes, dates, times of day and days of week~~Apparatus according to claim 1, wherein the processing agent includes a plurality of transmission cost data for a plurality of different dates.

16. (Currently Amended) ~~A communications management system according to any one of claims 9 to 11 in which the processing agent retains infrastructure cost data for conversion of duration and/or size measurements into infrastructure cost.~~Apparatus according to claim 1, wherein the processing agent includes a plurality of transmission cost data for a plurality of different times of the day and days of the week.

17. (Currently Amended) ~~A communications management system according to claim 16 in which the processing agent includes a plurality of infrastructure cost data for a plurality of different infrastructure types, locations, routes, dates, time of day and days of week~~Apparatus according to claim 1, wherein the processing agent retains infrastructure cost data for conversion of duration into infrastructure cost.

18. (Currently Amended) ~~A communications management system according to any one of claims 1 to 17 in which the processing agent identifies unknown addresses present in the usage data but not contained in the database.~~Apparatus according to claim 1, wherein the processing agent retains infrastructure cost data for conversion of size measurements into infrastructure cost.

19. (Currently Amended) ~~A communications management system according to claim 18 in which the processing agent causes a message to be sent where such an unknown address is detected above a pre-set threshold~~Apparatus according to claim 1, wherein the processing agent includes a plurality of infrastructure cost data for a plurality of different infrastructure types.

20. (Currently Amended) ~~A communications management system according to claim 19 in which the threshold is defined as a pre-set number of occurrences within a pre-set time interval~~Apparatus according to claim 1, wherein the processing agent includes a plurality of infrastructure cost data for a plurality of different locations.

21. (Currently Amended) ~~A communications management system according to claim 19 or claim 20 in which the message is sent to an address local to the networked computing means and associated with the communications event in which the unknown address was detected~~Apparatus according to claim 1, wherein the processing agent includes a plurality of infrastructure cost data for a plurality of different routes.

22. (Currently Amended) ~~A communications management system according to claim 21 in which the local address is one included in the communications event~~Apparatus according to claim 1, wherein the processing agent includes a plurality of infrastructure cost data for a plurality of different dates.

23. (Currently Amended) ~~A communications management system according to claim 21 in which the local address is one correlated with the local address included in the communications event but associated with a different communications channel~~Apparatus

according to claim 1, wherein the processing agent includes a plurality of infrastructure cost data for a plurality of different times of the day.

24. (Currently Amended) ~~A communications management system according to any one of claims 19 to 23 in which the message is sent via email~~Apparatus according to claim 1, wherein the processing agent includes a plurality of infrastructure cost data for different days of the week.

25. (Currently Amended) ~~A communications management system according to claim 24 in which the email message includes a link to a web page adapted to accept identifying information for the unknown address and update the database accordingly~~A method of managing communications by determining costs associated with the use of communications resources, comprising the steps of:

accessing usage data from a plurality of communications resources;

consolidating said usage data from system-specific formats to a common format;

inferring costs for communication events that do not have a recorded duration.

26. (Currently Amended) ~~A communications management system according to any one of the preceding claims in which an analysis agent is provided, capable of selecting, aggregating and summarizing the processed data~~A method according to claim 25, wherein the costs for communication events that do not have a recorded duration are inferred with reference to a defined time for any data transmitted.

27. (New) A method according to claim 25, wherein the costs for communication events that do not have a recorded duration are inferred with reference to a defined time for any data transmission.

28. (New) A method according to claim 25, wherein the costs for communication events that do not have a recorded duration are inferred with reference to a defined time per byte of data transmitted up to a defined maximum.

29. (New) A method according to claim 25, wherein staff cost data is retained for the conversion of duration measurements and inferences into staff costs.

30. (New) A method according to claim 25, wherein transmission cost data is retained for the conversion of duration (measured and inferred) into transmission costs.

31. (New) A communications management apparatus, comprising a networked computing means on which is provided:

a translation agent with access to usage data of a plurality of communications resources;

a database accessible to the translation agent and including data in a system-specific format to assist the translation agent to convert this to a common format; and

a processing agent, wherein

said translation agent is arranged to consolidate the usage data of said plurality of communications resources by consulting said database and converting system-specific data to data having said common format; and

said processing agent is arranged to identify unknown addresses present in the usage data but not contained in the database.

32. (New) A communications management apparatus according to claim 31, wherein the processing agent causes a message to be sent where such an unknown address is detected a number of times above a pre-set threshold.

33. (New) Apparatus according to claim 32, wherein said threshold is defined as a pre-set number of occurrences within a pre-set time interval.

34. (New) Apparatus according to claim 32, wherein said message is sent to an address local to the networked computing means and associated with the communications event in which the unknown address was detected.

35. (New) Apparatus according to claim 34, wherein said local address is one included in the communications event.

36. (New) Apparatus according to claim 35, wherein said local address is one correlated with the local address included in the communications event but associated with a different communications channel.

37. (New) Apparatus according to claim 32, wherein said message is sent via email.

38. (New) Apparatus according to claim 37, wherein said email message includes a link to a web page adapted to accept identifying information for the unknown address and to update the database accordingly.

39. (New) A method of managing communications by determining costs associated with the use of communications resources, comprising the steps of:

- accessing usage data from a plurality of communications resources;
- consolidating said usage data from system-specific formats to a common format;
- costing communication events that have a recorded duration; and
- maintaining a database of communications addresses to identify known addresses;

and

- identifying unknown addresses present in the usage data but not contained in the database;
- inferring costs for communication events that do not have a recorded duration.

40. (New) A method according to claim 9, wherein a message is sent when an unknown address is detected as occurring a number of times above a pre-set threshold.

41. (New) A method according to claim 40, wherein said threshold is defined as a pre-set number of occurrences within a pre-set time interval.

42. (New) A method according to claim 40, wherein said message is sent to an address local to the networked computing environment and associated with the communications event in which the unknown address was detected.

43. (New) A method according to claim 42, wherein said local address is one included in the communications event.

44. (New) A method according to claim 42, wherein said local address is one correlated with the local address included in the communications event but associated with a different communications channel.

45. (New) A method according to claim 40, wherein said message is sent by email.

46. (New) A method according to claim 15, wherein said email message includes a link to a web page adapted to accept identifying information for the unknown address and to update the database accordingly.